

AMENDMENTS TO THE CLAIMS

Please cancel Claims 2, 4, and 17 through 19 without prejudice to or disclaimer of the subject matter recited therein.

Please amend Claims 1, 5, 6, 7, 8, and 11 as follows:

1. (Currently Amended) A focusing-information detecting apparatus for executing a focusing calculation according to an image signal sent from a sensor block formed of a plurality of cell units which accumulate image signal components, said apparatus comprising:

a control circuit for controlling an operation for accumulating image signal components in the sensor block;

a characteristic determination circuit for ~~reading~~ monitoring a P-B signal from a first set of the plurality of cell units in the sensor block, ~~and for determining the characteristics of the corresponding image signal after the accumulation operation controlled by said control circuit is finished;~~ and

a reading processing circuit for performing an operation of (a) applying signal reading processing at least to other to the plurality of cell units in the sensor block but not included in the first set in the sensor block in response to the monitoring determination result obtained by said characteristic determination circuit being a predetermined result, and for (b) disabling signal reading processing at least for the other for the plurality of cell units in response to the monitoring determination result obtained by said characteristic determination circuit is being another predetermined result, which is different from the predetermined result,

~~wherein the sensor block corresponds to a single focus detection area wherein~~
every time the operation for accumulating image signal components in the sensor block is

finished, the monitoring a P-B signal by said characteristic determination circuit and the operation executed by said reading processing circuit are performed.

2. (Cancelled)

3. (Previously Presented) A focusing-information detecting apparatus according to Claim 1, wherein the first set of the plurality of cell units outputs a signal indicating the luminance or the contrast received by the sensor block.

4. (Cancelled)

5. (Currently Amended) A detecting apparatus for detecting a focus state or distance information according to an image signal accumulated by each of a plurality of image-signal accumulation sensor blocks respectively corresponding to a plurality of focus or distance detection areas, said apparatus comprising:

a reading circuit for reading, every time an operation for accumulating image signal components is finished in a sensor block, the image signal from the sensor block where the accumulation operation has been finished;

a reading control circuit for executing, during the reading operation, a ~~first reading~~ monitoring processing operation for ~~reading~~ monitoring the ~~characteristic~~ P-B signal of the image signal in a sensor block to which the reading operation is applied, and for selectively executing a ~~second~~ reading processing operation for reading the image signal from the sensor block whose ~~characteristic~~ P-B signal was subject to the ~~first reading~~ monitoring processing operation, after

the ~~first reading~~ monitoring processing operation; ~~wherein the sensor block corresponds to a single focus or distance detection area;~~

a determination circuit for evaluating the characteristic P-B signal read in the ~~first reading~~ monitoring processing operation and for determining whether or not the ~~second reading~~ processing operation is to be executed; and

a circuit for detecting the focus state or distance information according to the image signal reading performed by said reading circuit.

6. (Currently Amended) A detecting apparatus according to Claim 5, wherein said determination circuit disables the ~~second reading~~ processing operation when the characteristic P-B signal indicates that the image signal is inappropriate for focus or distance information detection.

7. (Currently Amended) A detecting apparatus for calculating focus detection information or distance information according to an image signal accumulated in each of a plurality of image-signal accumulation sensor blocks respectively corresponding to a plurality of focus or distance detection areas, said apparatus comprising:

a ~~first output~~ monitoring circuit for ~~outputting~~ monitoring the characteristic P-B signal of a photoelectrically converted image signal in each focus or distance detection area;

a ~~second~~ an output circuit for outputting the photoelectrically converted image signal in each focus or distance detection area;

a ~~first signal reading circuit for reading the characteristic signal from the first output circuit;~~

a ~~second~~ signal reading circuit for reading the image signal from the ~~second~~ output circuit;

a reading control circuit for comparing the level of the ~~characteristic~~ P-B signal read by said ~~first signal reading~~ monitoring circuit for a focus or distance detection area with a determination level determined in advance, for controlling said ~~second~~ signal reading circuit to read the image signal in that same focus or distance detection area in response to the level of the ~~characteristic~~ P-B signal having a first relationship with the determination level, and for disabling reading of the image signal by the ~~second~~ signal reading circuit in that same focus or distance detection area in response to the level of the ~~characteristic~~ P-B signal having a second relationship with the determination level different from the first relationship; and

a focus calculating circuit for calculating focus detection information or distance information according to an image signal accumulated in each of the plurality of image-signal accumulation sensor blocks respectively corresponding to the plurality of focus or distance detection areas.

8. (Currently Amended) A detecting apparatus according to Claim 7, further comprising a determination-level changing circuit for determining whether focus or distance detection has succeeded in a focus or distance detection area among the plurality of focus or distance detection areas, and, when focus or distance detection has succeeded in a focus or distance detection area, for changing the determination level according to the level of a ~~characteristic~~ the P-B signal in the focus or distance detection area.

9. (Previously Presented) A detecting apparatus according to Claim 7, further comprising a level changing circuit for determining whether focus or distance detection has succeeded in a focus or distance detection area among the plurality of focus or distance detection areas, and for changing the determination level so that it has a first value in a case in which focus or distance detection has succeeded in a focus or distance detection area and a second value different from the first value in a case in which it has not succeeded.

10. (Previously Presented) A detecting apparatus according to Claim 7, further comprising a determination circuit for determining whether focus or distance detection has already succeeded in a focus or distance detection area among the plurality of focus or distance detection areas, and, only when focus or distance detection has succeeded in a focus or distance detection area, for determining whether reading is to be performed in accordance with the determination level.

11. (Currently Amended) A detecting apparatus according to Claim 7, wherein the characteristic P-B signal of the photoelectrically converted image signal is a signal indicating the difference between the maximum value and the minimum value of the photoelectrically converted image signal.

12. (Previously Presented) A detecting apparatus for calculating focus or distance detection information from an image signal accumulated in each of a plurality of image-signal accumulation sensor blocks respectively corresponding to a plurality of focus or distance detection areas, said apparatus comprising:

(a) a focus detecting sensor comprising:

(1) a difference output section for outputting the difference between the maximum value and the minimum value of a photoelectrically converted image signal in each focus or distance detection area,

(2) an image-signal output section for outputting the photoelectrically converted image signal in each focus or distance detection area, and

(3) a signal reading section for reading signals from said difference output section and said image-signal output section;

(b) a reading control circuit for reading the difference output for a focus or distance detection area from said difference output section through said signal reading section, for reading the image signal output from said image-signal output section through said signal reading section in that same focus or distance detection area in response to the difference being greater than a predetermined value, and for disabling reading of the image signal in that same focus or distance detection area in response to the difference being smaller than the predetermined value; and

(c) a calculation circuit for calculating focus or distance detection information according to the read image signal.

13. (Original) A detecting apparatus according to Claim 12, further comprising a changing circuit for determining whether focus or distance detection has already succeeded in a focus or distance detection area among the plurality of focus or distance detection areas, and, when focus or distance detection has succeeded in a focus or distance detection area, for

changing the predetermined value according to the value of the characteristic signal in the focus or distance detection area.

14. (Previously Presented) A detecting apparatus according to Claim 12, further comprising a changing circuit for determining whether focus or distance detection has already succeeded in a focus or distance detection area among the plurality of focus or distance detection areas, and for changing the determination value so that it has a first value in a case in which focus or distance detection has succeeded in a focus or distance detection area and a second value in different from the first value a case in which it has not succeeded.

15. (Previously Presented) A detecting apparatus according to Claim 12, further comprising a determination circuit for determining whether focus or distance detection has already succeeded in a focus or distance detection area among the plurality of focus or distance detection areas, and, only when focus or distance detection has succeeded in a focus or distance detection area, for determining whether reading is performed in accordance with the difference being greater than the predetermined value.

16. (Previously Presented) A detecting apparatus for calculating focus or distance detection information from an image signal accumulated in each of a plurality of image-signal accumulation sensor blocks respectively corresponding to a plurality of focus or distance detection areas, said apparatus comprising:

(a) a focus detecting sensor comprising:

(1) a maximum-value output section for outputting the maximum value of a photoelectrically converted image signal in each focus or distance detection area,

(2) a minimum-value output section for outputting the minimum value of the photoelectrically converted image signal in each focus or distance detection area,

(3) an image-signal output section for outputting the photoelectrically converted image signal in each focus or distance detection area, and

(4) a signal reading section for reading a signal from said maximum-value output section, from said minimum-value output section, and said image-signal output section;

(b) a reading control circuit for reading the maximum value and the minimum value of the image signal for a focus or distance detection area through said signal reading section, for calculating the difference therebetween, for reading the image signal through said signal reading section in that same focus or distance detection area in response to the difference is being greater than a predetermined value, and for disabling reading of the image signal in that same focus or distance detection area in response to the difference being smaller than the predetermined value; and

(c) a calculation circuit for calculating focus or distance detection information according to the read image signal.

17-19. (Cancelled)